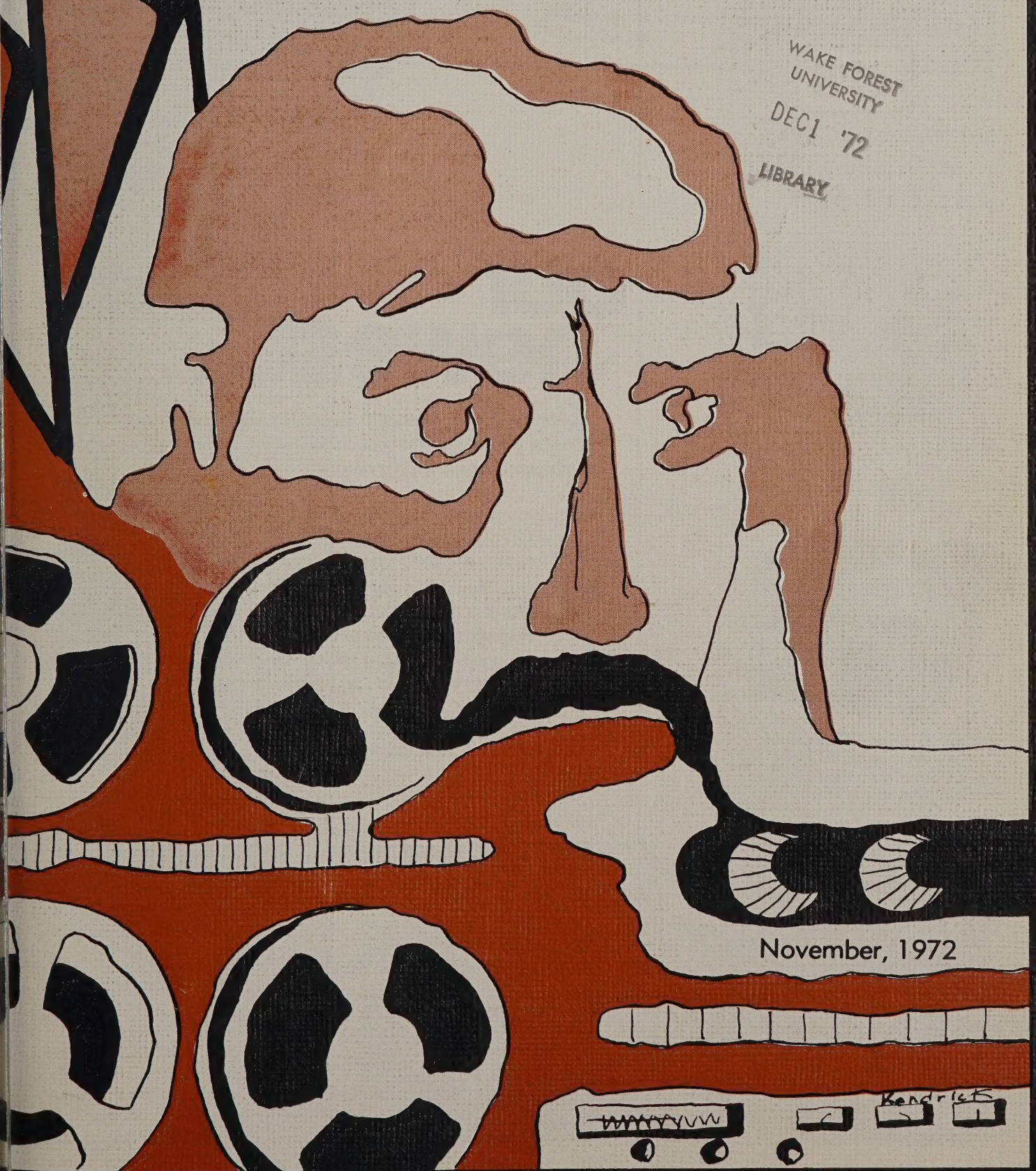


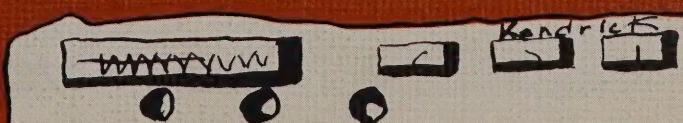
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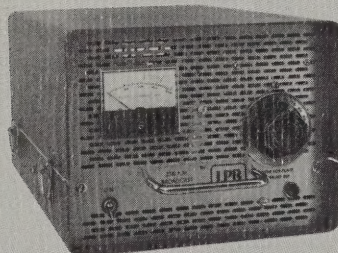


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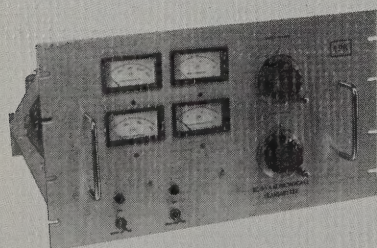
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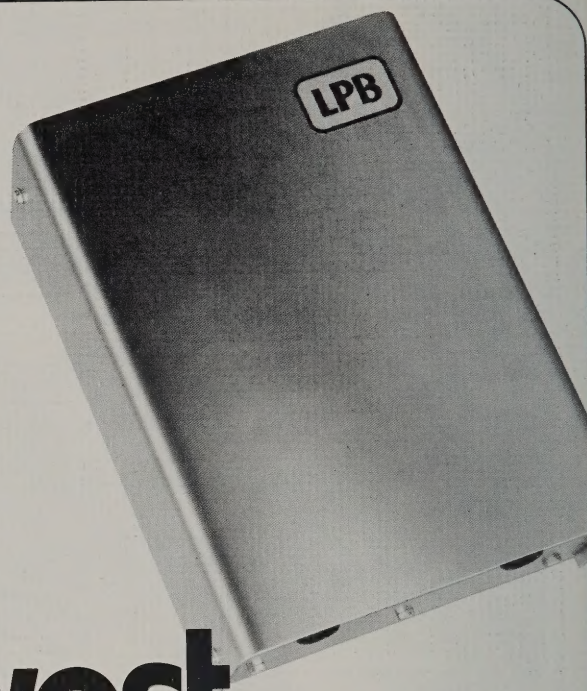
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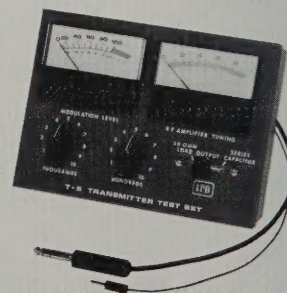
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Volume 10, No. 3

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IBS Board Member Guarantees

Revenue Increase To IBS

Commercial Members

Joseph D. Coons, who has long been associated with the activities of the Intercollegiate Broadcasting System, and who now is a member of the IBS Board, has made IBS Commercial Stations a startling offer.

"I can increase any commercial IBS station's revenue \$1,000.00 if they will attend one of our Sales Seminars and take the advice we give them", says Coons.

The Sales Seminars to which Coons refers are being offered by IBS throughout this entire school year. They are given without charge of any kind by Coons, who serves as Sales Consultant to IBS stations. At each seminar, Coons first reviews the steps to a successful sale of radio time to advertisers; he then discusses promotion and sales development programs for stations to undertake. His presentations utilize not only the lecture technique, but also role plays and anecdotes. The sessions are oriented to Station General Managers, Business Managers and Sales personnel. In addition, Coons welcomes to the sessions creative personnel whose responsibilities include copywriting, station promotion, and station advertising.

Stations may schedule a Sales Seminar by taking several steps. First, the station must plan to serve as host for other area stations within a reasonable distance. This requirement is made so that the maximum number of people can benefit from this idea service. Second, a station interested in sponsoring such a seminar should contact Coons at his office, P.O. Box 1066, East Liverpool, Ohio 43920, Telephone (216) 386-6662 to set a suitable date. That's all there is to it.

Coons stresses that in order to offer the seminars without charge, they normally will have to be held at a campus on a weekday evening, and in addition the scheduling will have to be tied in

with his own schedule as National Director of Major Market Sales for IGM, the national equipment manufacturer and music syndicator. As a result of the travel scheduling, most seminars will be run on a two week notice basis. Thus, co-ordination with the other stations which are participating is important.

Coons brings to this endeavor for IBS a number of important background qualifications. In addition to serving as Business Manager for his own colleges' radio station, he owned and operated his own local radio station in East Liverpool for eleven years, prior to selling them and taking on this national responsibility for IGM. In addition to his IGM work, he is the operator of Station System Analysis, a paperwork consulting firm with clients located throughout the United States. SSA specializes in broadcasting administration problems. Coons, individually currently has responsibility for three-quarters of a million dollars in annual sales for IGM and SSA. In addition, he develops marketing materials and supports other IGM salesmen in the company's new specialized line of computer-based automation systems.

In spite of his present hardware and systems interest, however, Coons stresses that the entire Sales Seminar presentation will be about nothing but bringing in income for stations. The IBS Seminars will be solely oriented to increasing revenue. As an indication of his expertise, it should be noted that Coons' college station grossed over \$10,000.00 annually in 1959. In 1972 that would probably be in excess of \$20,000.00 just due to inflation and that was a campus with, at the time, only a thousand students and only seven hundred on campus!

Why not plan now to organize one of these seminars for the stations in your own area and begin increasing station revenues?

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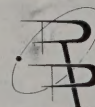
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How To Lose All Your

Gary Austin Witt

Late in 1971 those famous folks who brought you PBS took steps to irrigate a wasteland that Newton Minnow never told us about: radio. Surely you knew of the wind erosion that radio has endured these past two decades? Yes, indeed, the garden spot of the nation lost all its topsoil to that more famous wasteland in the early '50's, leaving the nightly haven of postwar America with only its bare subsoil, music.

Now before you ask me to step outside, I've nothing against music (in fact, I'm listening to some fine old jazz as I write this). The truth is that the disc has kept radio from going the way of the crank-up phonograph. But enough is enough. When the only way you can stay in business today (and please Uncle) is to play music, with a tidbit of news or miscellaneous thrown in to satisfy "public interest, convenience, and necessity," somebody took a wrong turn at the last fork, Jack. Isn't it really kind of silly for a medium as powerful as radio to be running a Xerox service for the home stereo? Recently a young man in a radio class or mine asked me, "Do you mean that radio used to have programs like TV? That sounds groovy. How come they don't now?" I'm afraid that my answer of economics and brain-drain sounded as tinny to him as it did to me.

Commercial radio and TV are both by and large homogenous media. Radio is musical entertainment; TV is contrived situation entertainment ('40s radio was a picture, just like us jocks been telling you TV people all along!) Seemingly this is what a great majority of the people want. Both media's philosophy seems to be "What the majority wants, is what you all gets." No argument! I don't think anyone—even Nick Johnson—believes in this enlightened age that the people own the airwaves; the nets and owners have squatter's

rights. So be it. But in the name of the "American Way" shouldn't something be done for us dissatisfied minority? I would venture to say that everyone but the lowest of the lowest-common-denominators cry "ugh!" at one time or another—we're a constantly changing group of dissatisfied people. What is the minority dissatisfied about? Well, what have you griped about lately? Let's stick to radio gripes, since that's what the rest of the article is about. Probably, if you're similar to my survey group (N=1000), it is that lack of first hand, or detailed, or any, coverage of news—especially local news. Yes, indeed, that's what the people say—we want more and better news coverage on all levels, but mainly at the local level. (It isn't the only thing they want—but it's the biggest demand. Also they don't want it on all subjects, but the specific topic varies with almost every person.)

Quickly and clearly realizing their listener's problem, the networks, government, and most all commercial station bosses cried out the obvious answer from high atop their ivory towers; "Cast your eyes from the wasteland toward the network of Cannan which is called PBS." And, lo, we cast our eyes up to view William Buckley and Washington Report, Sesame Street and Elizabeth R. And we said, "It is good." But what of Classical Guitar, and the French Chef, and Southern Perspective and Feminine Fitness? It isn't

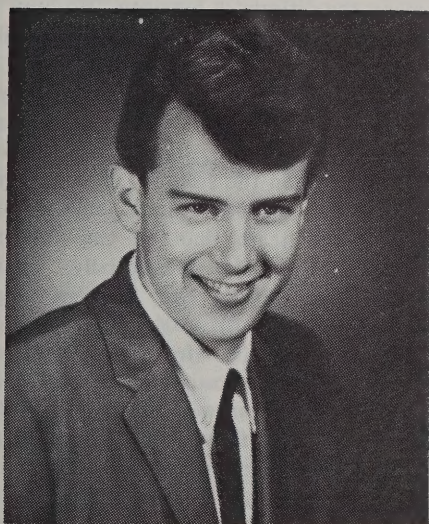
exactly manna from the airwaves! (And after the mighty pen vetoed the bill, who knows what wonders we can look forward to next year. Perhaps Great Moments in Oral Hygiene.)

And thus did our solons of the talking boxes answer us in a mighty voice filled with rancor (for we had again interrupted their worship of the Almighty Dollar), "Oh, ye of little percentage, tune your ears to that part of Cannan called Public Service Radio, and leave us in peace!" (The above term includes all non-commercial radio stations.)

And so, casting our eyes, glowing with faith, to that part of Cannan called Public Service Radio, we were sore afraid and depressed, for it was as though the locusts had held field maneuvers there, leaving no mental manna at all for the deserving, dissatisfied minority. Now all you who were wondering what was meant by the title may prepare to receive your answer. For out of the East, as a mighty wind, came the salvation of Public Service Radio. The voice of Macy called out and beckoned us to hear the great name of ENPER. In tablets of stone were carved the letters NPR which we exalted to high places in our letterhead, for Enper brought fine gifts to qualifying stations, almost equal to those of her big sister Pebus. For this we were ready to go to untold trouble in rescheduling and culling our musical and interview programs.

**"Isn't it really kind of silly for a medium
as powerful as radio to be running a
Xerox service for the home stereo?"**

Buttons Without Even Trying



Gary Austin Witt was, until August of 1972, station manager of KNCT-FM, Texas. KNCT-FM is a 50kw educational station licensed to Central Texas College, where Mr. Witt also taught courses in radio-TV broadcasting. Presently he is working on his Ph.D. in radio-TV-film at the University of Texas in Austin.

Mr. Witt, 26, has received a B.S., psychology, University of Illinois, 1968; and a M.S., radio-TV-film, University of Illinois, 1969.

In addition to being a station manager of KNCT-FM, Mr. Witt's experience includes: announcer/producer, WFIV radio, Fairchild, Illinois; TV director, Army Mobile Television Unit, Tobyhanna, Pennsylvania; and director, Bazongie Commercials, Austin, Texas.

But, wait, you of great faith, for Enper is not your savior! She is your salvation—but there's a big difference. At the top of every piece of NPR stationery this motto should be engraved boldly for all to see, "Enper helps those who help themselves." For you see, NPR is no more capable of pulling us up by the scruf of our necks than we are, but what she can do is help us pull ourselves up by our bootstraps. NPR programs cannot, and were never intended to be, the main bulk of our non-musical programming. Certainly, it's manna; but radio stations, like listeners, were never intended to live by bread alone. In other words, there's an insidious abdication of responsibility going on. Awake! Awake! The mental monster called Satisfied is among us! This sly demon works by implanting in the brain of the unwary station manager or program director the idea "now that I can use NPR to build my programming around, I won't have to spend all that extra money and time on improving my own programs. What I do now qualified me under that educational-informational-cultural requirement to have NPR, so why worry about improving my quality—after all, that's what I've got NPR for, isn't it?"

Station managers already infected by such thoughts had better beat a hasty path to the nearest Center for Liquid Refreshment to receive the cure called Public Opinion. After several libations and many questions, you'll discover the value of the all-important programming foundation called Local Public Service Programming (LPSP). Those who build their programming on NPR will find their station built on sand, but those who build on LPSP will find a foundation of rock, capable of weathering the worst storms. For you will have Station Loyalty!

Hoping that the above journey through the world of metaphorical wonderland has been thought-provoking and interesting, let's get on with this

article. NPR may be our salvation, but it is undoubtedly LPSP that will be the ultimate savior of anti-music box radio. Public Service Radio fills the gap vacated by commercial radio, that is, the people's need to know. For the majority, commercial radio's hour-on-the-hour newscasts suffice most of the time. But when it doesn't, when any one person or group wants to know more than the cursory facts, these people join the ranks of the dissatisfied. It is for this varied group of people that Public Service Radio is tailored. For it, and it alone, has (or should have) the flexibility, time, staff, and desire to provide the in-depth reports the minority wants, and needs. This means a wide variety of reports, because the dissatisfied minority is itself made up of many groups. A station built on LPSP tries to provide something for each of these minorities of the minority. NPR will alleviate their desires for more information on the national scene, but certainly not the need for local information. Now here is where we separate the men from the boys. All public service radio stations have some local public service programming (LSPS), but the decisive point is How Much? and What Quality? Of the two, the latter is by far the most important. The number of local public service programs will, to some extent, be indicative of the number of minorities that you are satisfying. A station would be wise to produce as many varied public service programs as their budget and staff will allow. The benefits in service and public appreciation will be obvious, and very gratifying.

Keep in mind, however, that four cheap programs are not necessarily equal to two more expensive shows. In fact, in most cases, the two expensive programs will be of much greater value than the four. Plus, the staff will receive more personal satisfaction from these greater achievements and, if you're interested, don't forget all those awards given for excellence in programming). Unfortunately, quality is too often directly equated with expenditure. This fallacious assumption has been the downfall of almost as many radio programs as government programs.

The equation is true in only one form: Quality = money + planning + pride. You know this though; anyone in this business who cares about his product knows this—but like many other truisms, we tend to forget.

Another aspect of this equation for LPSP quality that we often tend to

(continued next page)

**"All too often we hear people say,
'who listens to that garbage anyway,
it's dull as hell!'"**

overlook has to do with "planning" Planning doesn't just mean the time spent preparing the program, but also the time spent deciding exactly what program is needed. Too often we program on a hit or miss basis. You may know that a program is needed on poverty in the community. Assigning the project to a staffer in this form is one of the surest ways to waste your money. Unless you have a very unusual staffer, you will end up with a hodge-podge of history and current actions, and very little relevance or interest. And that spells Change The Station!

Instead, your time could be effectively spent determining exactly what the content of the program should be, what the listener needs and wants to know. Isn't that why you're the manager and he's the staffer? But how often have we all been lax in taking time to do what is most important: the initial planning? All too often we hear people say, "Who listens to that garbage anyway, it's dull as hell!" Can any of us deny that charge? Yes—it is dull, and it shouldn't be. Not when the competition is spending \$50,000 to \$100,000 to lure our audience to the tube. Often one reason it's dull, is that it isn't to the point. Oh, undoubtedly it will make some sort of a point, but that isn't good enough when you're competing with Mannix for viewers. You must be sure that the program makes the point and covers the material that your dissatisfied minority wants to hear—and not what you (or your staffer) thinks they want to hear. If you'll pardon the influx of a simile, public service programming is like archery: only the ones who hit the bulls-eye win the prizes.

But how, you ask, are we to determine what those dissatisfied minorities really want? By effectively using what you have the least of—TIME. Your common surveys and questionnaires aren't good enough in the business of public service programming, especially if those surveys of yours are sampling only a few people comparatively. Why?

Because you can't determine what exactly your varied listeners want by just determining their age, sex, and number of kids. After all, a vast majority of people with the exact same survey answers will be watching Let's Make A Deal or listening to radio music. You have got to be able to determine what the 2% that's left over want to hear. So, you say, ask them and be done with it! The best way I know to dispel this notion is to try a little experiment. Call five of your friends and ask them the type of program they would like to listen to that night. Chances are you aren't met with numbing silence, the answer you'll get will be "sports," "I dunno," or the old stand-by, "classical music." Why? Well, probably because they don't belong to the dissatisfied minority at that particular time. Unlike commercial radio, the number of people interested in listening to LPSP at any one time is small. But a majority of those listening to radio will, at one time or another, decidedly want to listen to public service programming. At that point they become one of the dissatisfied minority, desiring to listen for a particular reason. You will win their undying loyalty if, at the key time, you can furnish the exact program they want—the one that goes right to the bulls-eye.

If surveys or telephone questions don't do the trick, how is one to decide what to program? Referring back to our equation for quality programming, $\text{Quality} = \text{money} + \text{planning} + \text{pride}$, you must provide two necessary ingredients: Money and pride. Money obviously; anything done up right will take some cash out of your till. Pride also, for without pride, your planning and production will never get off the ground, much less fly to the mark. Pride in one's work will exude through the whole program like a beacon signaling, "I care about what I do, and I'm happy to be doing it."

But pride enters into the picture even earlier—in the planning stage (at

last we'll get that pesky question answered!). Without pride your planner will never go the "extra mile" that will tell you exactly what content is required. No? How often have we all settled for "It'll do" on a project we weren't interested in? Too often. In planning LPSP, the lack of pride is disastrous.

Now let's start walking that extra mile (how does the song go? "Walking down that long, lonesome highway. . .") It is lonesome; there aren't many who are willing to walk it.) Pride in what you're doing will literally make you work that extra hour, ask that extra question, revamp that hasty edit, and think, really think, about what the final product should be.

Of course, you need facts to think with. If you're willing to go that extra mile, then you'll be highly informed on the news events throughout the world, nation, state, and your own community. With these facts, you can anticipate what your listeners may want, and specifically who they may be. Armed with this probable knowledge, you'll be able to ask pertinent questions to pertinent listeners, thus verifying and clarifying their needs. You'll also find yourself going that extra mile with your sustaining LPSP programming that can mean the difference between "Ho hum" and "Say, that was pretty good!" It's all part of pride in what you broadcast.

There's an area of psychology called Gestalt psychology (Gestalt being German for "form") that says the whole is greater than the sum of its parts. For example, a football team is able to do more as a team than all the players could do working individually. Your production is like this. It's meaning comes not only from the parts of the program, but also from where these parts appear in the program, and the relation they have with the other parts. This is Gestalt. For you it means taking the time to decide where in the program that good interview would be most effective, and what exactly should follow it for the most impact. What kind of music should you use and what specific songs to help clarify and heighten the mood; how long should the program run; what format; what kind of voice for the narration. . . and on and on until you've got a truly complete script. This is the kind of dedication, hard work, and thought it will take to make our radio wasteland bloom again. NPR can't do it all, or even most of it. It's up to you.

If you don't believe this, you're operating with a nineteenth century

mind—check the psychology journals. Check the advertising and media journals, too. It's all there. If you do take the time to and thought to consistently produce completely scripted local public service programming, you'll have so many listeners and awards you'll have to build a special case for them all.

So there you have it. If you want quality local public service programming, you're going to 1) put a gun in your accountant's ribs (whispering "Here's good programming, give me money), 2) you're going to tell your wife that you'll be an hour later and to fix two martinis, and 3) you're going to give your team that old "win one for the Gipper" speech. Then you're all going to go out there and work like hell for dear old radio!

Now let's review what this article has meant to you. If nothing else you've spent a pleasant quarter-hour away from your troubles, getting a few ideas to munch on, and reading the harangues of Dudley Doright in the flesh (if you know of whom I speak, you either have young children or strange viewing

**"Enper helps
them who
helps
themselves"**

habits). Hopefully, though, you'll give serious consideration to abandoning your wanton ways of living off Enper, and begin making valient efforts to improve your local public service programming. NPR can be a mighty fortress, furnishing us with many hours of good programming. But if we don't provide local programming of good quality, if we try to just "get by", we'll not only perpetuate radio as The Music Box (or Dullsville), but also defeat the whole purpose of NPR: to serve as the mortar for the bricks of local efforts in quality programming for the dissatisfied minority. Remember that logo: "Enper helps them who help themselves."

I've got a bumper sticker on my car that reads "Public Radio: The rare medium that's well done." Now don't you make my bumper sticker out to be a liar, ya hear?!

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For the Radio Station that wants to be fully equipped, there is available a special set of 15 Long Playing albums of Sound Effects for broadcast purposes. The Sound Effects set is particularly suited for those stations that broadcast a variety of material. Included in the series of albums are such effects as crowds, cash registers, basketball games,

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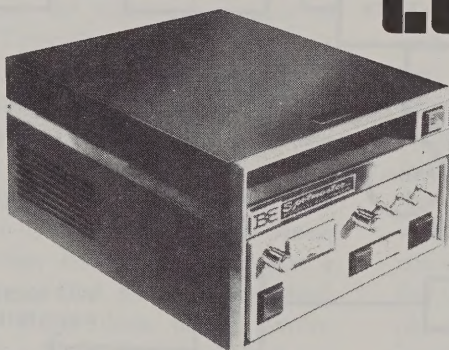
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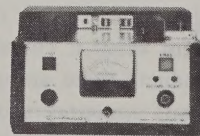
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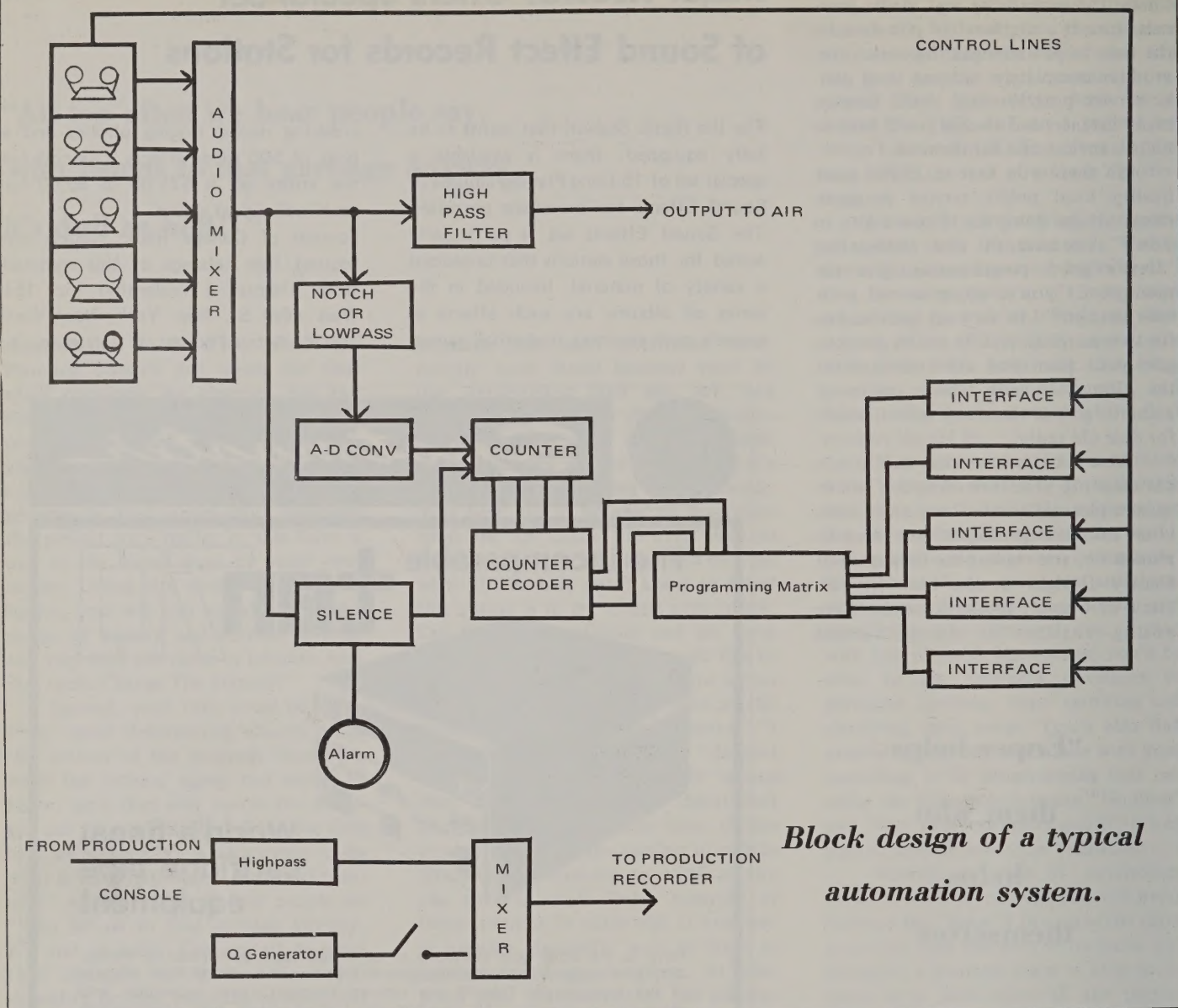
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Design Your Own Automation

Wayne Sung

A college radio station typically has one problem when it comes to delivering its product--there are usually some talented staff announcers but the large portion of the staff is relatively inexperienced and just learning. The people that have been around for a while can deliver, but they have other responsibilities also, i.e. their studies, and therefore cannot be on the air all the time. The net result is that part of the day's programming sounds amateurish compared to other time slots during the day.

An automation system can help re-

lieve this problem. First, the programmer does not have to be physically present during the show, and therefore can tape his material at his own convenience. Second, people that operate the system have something to learn. Third, as new programmers start making tapes for the system, any mistakes can be corrected before presentation time, allowing them to learn from mistakes and yet not have to be embarrassed by them.

It is not entirely correct to assume that a fancy automation system is

beyond the reach of the average college station. As a matter of fact, very simple schemes can be devised for this purpose. For example, one or two recorders can be hooked up so that the stopping of one machine when tape runs out starts the other machine. With the availability of good slow-speed machines, this is a viable approach. Nonetheless, this has one serious drawback. The sequence of material on the tapes is fixed, with at most blocks of several hours shifted around. The listener is able to identify the sequence after two or three playings and as soon as he does, all the fun goes out of listening. So a random access automation system is desirable.

The cost of circuitry is no longer beyond the reach of even the most casual experimenter. However, the first decisions that have to be made in terms of the design goals of an automation system do not concern circuitry. The first things to go down on paper are what the systems must be expected to do. As a custom designed system one can restrict the choice of features desirable and cut costs plenty this way. Some of the essential decisions that have to be made concern the number of events that can happen, the number of sources to be controlled, whether overlap of events is needed, and whether silence detection is desired. Other not-so-important but possibly useful features include time clocks, network joining or delaying, automatic backfill and ID, etc. Those first four features are the important ones, as they are encountered most often in the operation of the machine.

Cue handling is one thing worth special notice. There are two main types of cue mechanisms. The fixed delay kind shuts off a deck and advances the sequence a fixed time after the cue tone appears. The variable delay allows overlap of events, allowing walkups and extros to come on top of music. For progressive rock and top-40 stations, the latter is more desirable. For MOR stations the former is perhaps sufficient.

The number of events is really a matter of how much circuitry you want

electronics can be built using relays, discrete semiconductors or integrated semiconductors. Relay logic is simple, but there are a lot of wires that have to be connected. True digital logic circuits are often easier to manipulate. Of these, TTL is the least expensive and most readily available to the experimenter. They are also easy to handle. At present it is unfortunate that neither professional nor home-type tape recorder manufacturers have made TTL compatible control inputs, so some relays will still be required for interfacing.

The following paragraphs describe my experience in building, from scratch, an automation system. The system parameters were: variable overlap cue tone, length variable from one to 16 events, sources controllable up to ten, silence detection included. There is no muting of any input.

The limitations that came from circuitry are the maximum sequence length and the maximum number of sources. Typically some form of matrix selection system is used to associate a source to a step. This can take the form of rotary switches, thumbwheel switches, programming panels or just about anything you can think of. I used two ten-by-ten programming panels because they turned out to be just a little cheaper than sixteen thumbwheel switches. Using these panels involve pushing a pin into a hole which is the intersection of one row and one column. Using only eight columns per panel made a total length of 16 steps. The figure 16 is the maximum count of a 4-bit counter. This is a tradeoff be-

tween number of steps and number of wires. Since a variable length counter is to be used, (three bits would allow up to eight steps and four bits up to sixteen steps), this offers the opportunity of using MSI 4-bit counters. Incidentally, even though such counters are available, they present one problem. The ones I have come across load a number into the counter and then count either up to 16 or down to zero from there. This is okay if your people don't mind sequences that start in the middle of a panel of switches. However, it order not to be confusing to new operators, this is not really desirable. So in this system a variable-modulus 4-bit counter is built from the gate level up.

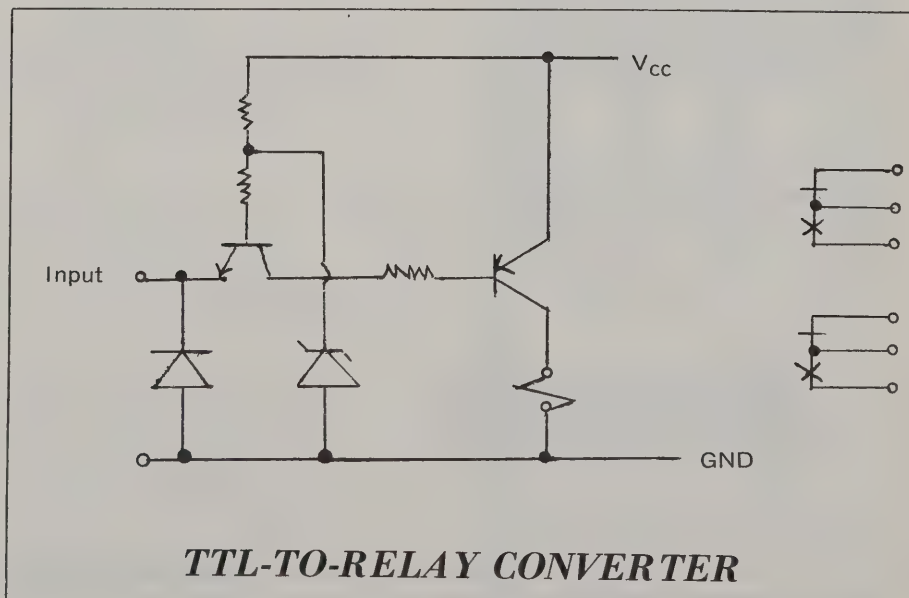
Once the counter style has been fixed, the next problem is the analog-to-digital conversion fo the cue tone from the tape to a form usable to trigger TTL. Don't let the large word scare you. There is a very simple way to do this. The traditional peak detector will work, with some reservation. But the really easy way to use ADC for this exercise happens to be a TTL circuit called a retriggerable multivibrator. Since we are talking about a variable length cue tone, the only time that anything can happen within the machine is at the start of the cue and at the end of it. Since TTL is so fast that level presences of more than 20 nanoseconds become meaningful it is possible to look at them as being edge-triggered. Let us now refer to the start of a number of cycles of control tone as the leading edge, and the end of the tone as the trailing edge of the tone. The retriggerable multivibrator, or RMV

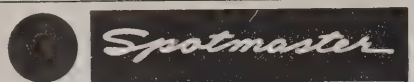
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to build. Using a binary counter, each additional stage allows a doubling of the total number of steps available. However, decoding becomes difficult and the cost of switches goes up. There should be no fewer steps than the maximum number of audio sources to be used with the system.

Silence detection is not always necessary. If it is desired, it should first be decided just what the silence detector is supposed to do in the way of starting an emergency sequence. For example, it can step the event counter on first fail of audio. Then it can keep on stepping or it can stop and give audible alarms.

These are the basic decisions. The





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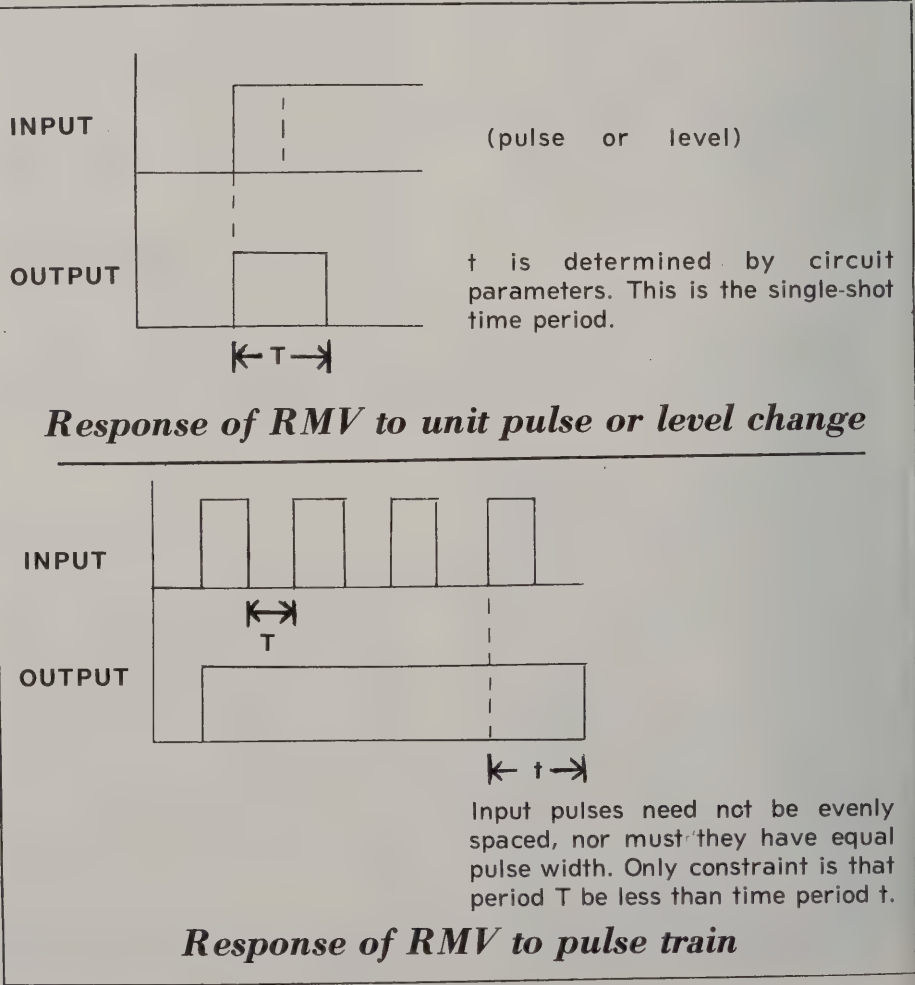
(continued from preceeding page)

as I will call it, is to make sure that all the TTL sees is a level that exists as long as cue tone is actually present. There is nothing that comes free, and actually the RMV does not reset instantly, and so the exact trailing edge of the tone cannot be caught. However, timing lengths required are no less than 40 milliseconds for a 25 hz cue tone, and therefore in most cases the reaction time of the RMV is short enough that on the outside it is negligible.

Next comes the problem of extracting the cue tone from the tape. Since a 25 hz tone will be used, we expect to see a few filters here and there working at 25 hz. The program material used must first be filtered to remove any 25 hz component. On playback, a notch or lowpass filter is used to send the cue tone to the RMV and another highpass filter removes the cue tone from the air signal. Highpass filtering is also recommended for the incoming material since it is difficult to position a

sharp notch in the face of slightly varying tape speeds. At any rate, a 50 hz or so highpass filter removes very little true program material and nobody will really miss it anyway. Thus we need two highpass filters and one notch or lowpass filter. The decision to be made here is whether to build your own or to buy readymade units. There is a 25 hz notch active filter available on the market for a reasonable price. There are also 25 hz lowpass and highpass passive units available, but these are expensive and not as sharp as an active unit. Consult your local engineering library for data on state-variable or elliptic filters. These are very effective. My filters are elliptic filters for the program material (I also use a state-variable filter elsewhere. This will be described momentarily). Measurements show that these are 40 dB-per-octave filters. This means that 25 hz components appearing from a record will be attenuated by 40 decibels since the filters begin rolling at 50 hz. The cue tone is recorded at -15 decibels compared to program material average.

(continued next page)



This gives a signal-to-noise ratio of about 25 dB. This proved to be inadequate in some circumstances. A Schmitt trigger increased the signal-to-noise ratio by another 15 to 20 decibels. Any resulting ripple will be taken care of by the RMV.

The generation of the cue tone to be used in the system deserves mention. Instead of using an analog oscillator, since a crystal-controlled time base is available in the digital section, a 100 hz signal is taken off that and divided by four to give a 25 hz square wave. This passes through a state-variable filter and emerges as a very pure sine wave. This signal now combines crystal stability and very low distortion. This signal is mixed with the filtered incoming audio through a switch and appears as the production out signal which in this case is delivered to a dedicated recorder. This recorder is used both for making the system tapes and also functions as a source when no production is being done.

The silence sense also uses an RMV. Incoming signal picked off either the system output or a tuner is squared up and triggers the RMV. The output of the RMV holds off a counter which counts off one second pulses. If no holdoff pulses appear within a certain period then the machine will attempt to advance the events counter by one step. If audio reappears, all is well and the counter resets. If no audio appears, then another timeout period passes and an alarm goes off. The timeout periods are determined by how many flip-flops you want to use, but times of less than ten seconds is not recommended because some selections are known to have pauses almost that long. Also you have to take into account the reversing time of any self-reversing machines that may be used in the system.

Last but not least there is the interface electronics. As was said before, tape machines are not directly TTL compatible and therefore some form of interfacing is necessary. Instead of saying exactly how to do this, suffice it to say that an on-off level must be converted to start-stop contact closures to operate tape machines. Incidentally, most cart machines nowadays do have control inputs that can be manipulated with TTL peripheral drivers. However, cart machines still have to be equipped

with the secondary cue electronics because most cart machines have trouble recording 25 hz.

There are provisions for adding a digital clock, automatic ID insert, multiple cartridge handlers, etc. The whole of the control electronics occupies about twenty inches in a standard rack. Tape recorders need not be mounted directly adjacent to the control electronics since at most six wires (plus ground, perhaps) need to go to each machine. Each machine needs a switch and earphone jack which allows the deck to be dissociated from the system for cueing and normal everyday uses.

On the operations side, the only control the programmer actually uses is the cue tone insert switch. This switch is used at the very moment a change of decks is required. However, since the mechanics do not stop instantly, a delay is desirable. Thus the tone is inserted about one second before the change is to take place. At the end of a selection, it is faded out (from the production console), the cue tone is stopped after

the fading is complete, and one second is allowed before the next selection is begun. This is the only getting-used-to on the whole machine. It gets rough on top-40 jocks that are used to as little dead air as possible, but then everybody has to learn.

The cost of the entire control electronics came to less than 500 dollars. This includes such niceties as pre-made circuit board, card cage and other things. The figure can be improved on somewhat by using a higher scale of integration. In this machine it was desirable to keep item cost (not parts count) low so that fewer different types of IC's have to be stocked as replacements. Also logic redundancy was not eliminated because the chance of a computer engineer appearing at the typical radio station is relatively remote and therefore the station engineer must be able to figure the machine out, especially if the designer leaves. The machine took five months to construct and test; most of that time was spent waiting for parts to come in.

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OTHERS SAY —

Unfortunately, campus radio in the midwest has chosen to say very little through FORMAT, although many have indicated their desire to see FORMAT continue and prosper. (Editor's note: Stations as a whole are saying very little, witness Letters to the Editor, JCR) Well folks, if campus radio in this region doesn't begin to motivate itself as a body to communicate, FORMAT, IBS and any other campus radio enterprise will be doomed to failure. I have to feel, however, that the apathy of last year will soon be ended. . .the IBS programming questionnaire, if it revealed nothing else, **did** indicate a desire on the part of college radio to get up and get going, and the station managers, program directors, and other people in station management who answered the questionnaire said they were ready to work. And that's just what college radio needs.

What can you do to help? How about beginning by utilizing FORMAT more than you have in the past. (Editor's note: How about utilizing JCR more).

What can FORMAT do for you? First of all, it is a regional publication, and in that capacity it is able to relate directly to the needs of the region. Let's face it, the midwest is not the east coast, nor is it the far west. We have problems which are germane to the midwest and radio philosophies which are a might different than those taught in the Ivy League. Specifically, FORMAT would like to hear from you considering: hour station and how it operates, your problems and their solutions (if any), your programming philosophy, your engineering achievement, your record service history, your gripes about IBS (remember this is an IBS publication), your play-lists, etc.

Let's make this a region to be proud of. . .let's start showing the rest of the campus radio world a fact: college radio in the midwest is dynamic, and is unafraid to make a contribution to the furthering of communication between people.

Make a start by contributing to FORMAT. . .it's your magazine.

(Reprinted from FORMAT, vol. 4, no. 3)

(Editor's note: The above was reprinted in an effort to urge all stations

to start an active drive to upgrade their regional activity. It is the hope of the JCR staff that more stations will start corresponding with JCR also).

Two Year Copyright Extension Voted

By a more than two to one majority, the House of Representatives voted to approve S. J. Res 247 that will extend copyright protection for an additional two years. Already approved by the Senate, the bill provides that musical and literary works that would have lost their copyright shelter as of December 31, 1972 will now be protected until December 31, 1974. JCR will discuss the new proposed legislation in a later issue.

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NEW Model RE10 \$166.00 shown on Model 421 desk stand \$20.00. **Model RE15** \$283.00 shown with Model 307 suspension mount \$37.00. **NEW Model RE11** \$177.50, shown with Model 311 snap-out stand adapter \$7.00. **NEW Model RE16** \$294.50, shown on Model 421 desk stand \$20.00. List prices shown. Normal trade discounts apply.

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Only acoustics and noise can limit you. Yet even here these new E-V microphones gain an advantage from the super-cardioid pattern that provides better sound control than ordinary cardioids. With maximum rejection 150° off axis, it is easier to eliminate unwanted sound while maintaining normal stand or boom microphone positions. There's also an integral bass-tilt circuit to cut rumble below 100 Hz. when needed.

Now Select from Four Models

In addition to the original RE15, we've added the RE16. The same fine microphone with an external "pop" filter to solve the problems of ultra-close miking.

The new RE10 is the economy version of the RE15. The same concept and quality, but for slightly less rigid requirements. And the RE11 is the lower cost twin to the RE16.

These four great cardioid microphones give you new freedom to head off sound problems before they start. Your E-V microphone headquarters has them waiting. Choose today.

*U.S. Patent No. 3,115,207. Trade mark registered.

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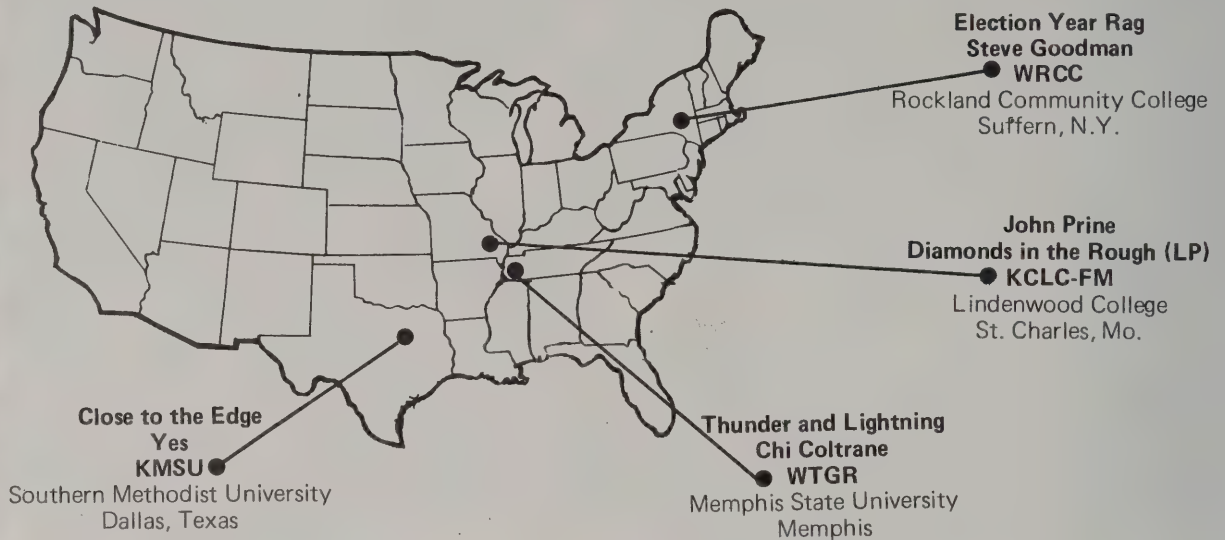
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SINGLES

BABY DON'T GET HOOKED ON ME
CITY OF NEW ORLEANS
FREDDY'S DEAD
FROM THE BEGINNING
GARDEN PARTY
GOOD TIME CHARLIE
I AM WOMAN
LISTEN TO THE MUSIC
MIDNIGHT RIDER
NIGHTS IN WHITE SATIN
ROCK ME ON THE WATER
SO LONG DIXIE
SUMMER BREEZE
THE SLIDER
THUNDER AND LIGHTNING
TIGHTROPE
USE ME
WITCHY WOMAN
YOU WEAR IT WELL

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Disc Notes

By RICK SPENCE

It seems rather strange to me that it takes so much time for campus stations to get their old routines going again after a mere summer break. Of course, everybody knows that new program directors, music directors, managers, etc., have been appointed to head up station staffs for the new academic year, but it is (at this writing) now the middle of **October** and I have just received the first playlists from about half of this month's reporting stations. But, I guess it's better late than never as they say.

Some new playlists have been coming in to **JCR** that have not been previously distributed to us on a regular basis. So, I'd like to welcome the following stations: First, **WOCR**, **SUNY**, in Osewgo, New York, should be congratulated for finally changing their **JCR** address so that their playlist reaches us in a satisfactory amount of time.

Welcome to **WSSE-FM**, St. Michael's College, Winoske, Vermont, **KDIC-FM**, Grinnell College, Grinnell, Iowa, who promote "radio in the cornfields," **WRCC**, Rockland Community College, Suffern, New York, **WYCP**, York College, York, Pennsylvania, **WLDC**, Loyola University in good ol' New Orleans, Louisiana, and **WKFB**, Keesler Medical Center, which, if I'm not mistaken (and correct me if I'm wrong) is in Biloxi, Mississippi. We are happy to have these stations reporting to us, and hope to have more newcomers in the very near future.

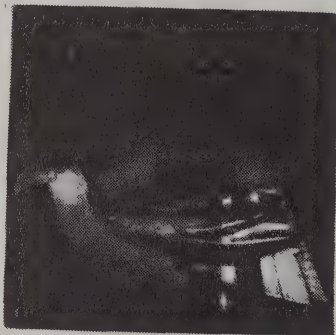
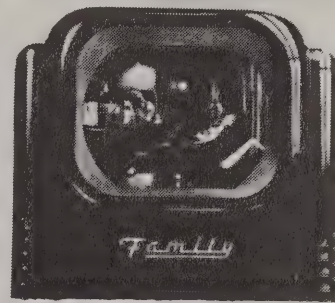
This month's album releases brought many surprises, among them a huge supply of new product by the Atlantic group of labels. Needless to say, the new Yes album, **Close To The Edge**, is their best to date, and brings the group to a point where they might possibly have the big seller of the year, at least as far as progressive rock goes, which this certainly is.

This was a very good month for both product releases and station reporting, and I think that next month will be even better, as long as everybody remembers to be just a little together. Send all playlists, along with itemized "breakouts" to me, at **JCR**.

FAMILY
(Bandstand)

UNITED ARTISTS UAS 5644

Family scores again with nine top tracks to round out a great new release. The group's sound permeates the body with a crispness and depth refreshing to the ear. One listen will assure any college music director that almost any cut will be right for his market.



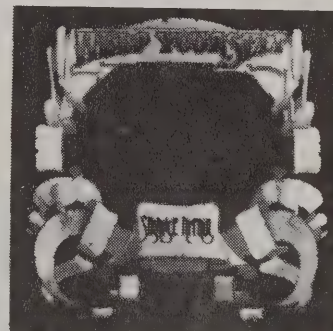
AMON DUUL II UNITED ARTISTS UAS 5586
(Carnival in Babylon)

This product seems to be slanted toward the campus listener, and is just **strange** enough to go over with the way-out types. No information is available at this time, but there is enough "meat" sound on the album to give it serious consideration for airplay.

HELP YOURSELF

(Strange Affair) **UNITED ARTISTS UAS 5591**

Solid acoustic and electric combinations give this group a cohesiveness that is rarely found in a more experienced union of performers. "Movie Star" is almost a sure thing if programmed, uniting the softness of flat-top with the fluent vocal harmonies of these talented artists. Very strong for both AM&FM.



STEELY DAN
(Can't Buy A Thrill)

ABC ABCX 758

The first offering by this newly-formed group is a collection of ten very commercial and entirely listenable tunes. Steely Dan shares lead-harmony vocals in a very pleasing manner. "Dirty Work" and "Reelin' In The Years" have hit appeal, but the real standout on this LP is "Turn That Heartbeat Over Again."

THE J. GEILS BAND "LIVE"
(Full House)

ATLANTIC SD 7241

The Band's previous offering, "The Morning After" was a fast moving blues number. In this new "Live" LP, the group shows itself to be a crowd pleaser with few equals. Contains two previously released tunes and six new cuts. Magick Dick on harp adds immensely to the successful rock-blues sound and helps to keep toes tapping. Album should do well on the campus.



Canadian R-T. C.

Liscenses New Class

ED: See related article on page 28

The Canadian Radio-Television Commission has instituted a new class of licence for student carrier current radio broadcasting undertakings. (also See JCR, September, 1972)

This enables the licensing of student carrier current undertakings designed for reception on the premises of the academic institution at the post-secondary educational level attended by those students.

In addition to providing a means of communication among the students, this will give many their first opportunity to engage in broadcasting.

Student carrier current broadcasting undertakings must provide a promise of performance and comply with the provisions of the Broadcasting Act.

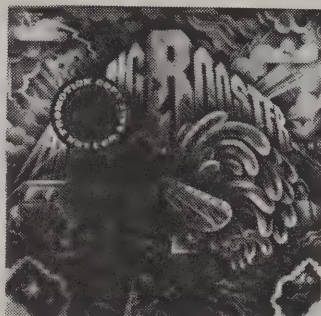
Licences to operate student carrier current radio stations will be issued only to duly constituted non-profit organizations.

The Commission believes that in order for this form of carrier current radio broadcasting to achieve its fullest potential as a medium of communication, students must organize and control it. Provision must be made to ensure that there is at all times a majority of students on the board of directors of any licensee.

Applicants for such a licence must demonstrate the financial feasibility of their proposals. While most financing may come from students' unions, some may originate in funds from the academic institution in which the broadcasting undertaking is situated. Such financing must be by means of grants only, in such a manner as not to infringe the direction of the federal Government to the Canadian Radio-Television Commission precluding the granting licences to provincial governments and agents and to educational institutions. All contractual arrangements between the institution and the proposed licensee must form part of the application for licence.

Applicants for such a licence must also obtain a Department of Communications certification in accordance with the provisions of Section 22(1)(b) of the Broadcasting Act.

(continued next page)



ATOMIC ROOSTER
(Made In England)

ELEKTRA 75039

The bird has gone through some changes since their last two Elektra LP's, "Death Walks Behing You" and "In Hearing Of" which were both standouts which deserved much more recognition. Their latest is a disappointment to any fan of their earlier tracks, but in no way is inferior to most of the current offerings, but lacks the depth and uniqueness of the old Atomic Rooster.

KENNY RANKIN LITTLE DAVID LD 1003
(Like A Seed)

Along with wife Yvonne, Kenny Rankin penned most of the songs on this new LP. Mellow is the keynote for the majority of tracks, and Ken's vocal workouts exhibit great variations in range and control. Top cut for single action: "Peaceful."



RAMATAM
(Ramatam)

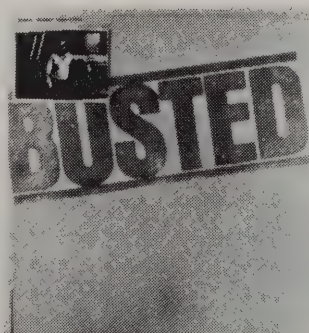
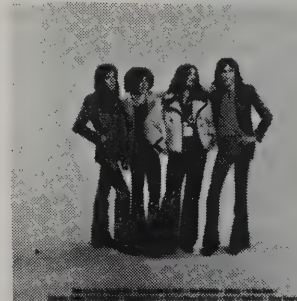
ATLANTIC SD -7236

Previously released before the summer break, Ramatam is starting to see action on the campus turntable. Group is a combination of many talents including Blues Image, Brooklyn Bridge and Hendrix Experience blood. Top rocks on chick lead guitarist April Lawton, who ranks with the best males in the business today.

SILVERHEAD
(Silverhead)

SIGNPOST SP 8407

Silverhead is an English hard rock group that tends toward the Alice Cooper style. Lots of heavy guitars, impulsive rhythms and plenty of drive round out the group for a great number of campus spins. Worth trying on your audience if you are adventurous.



MURRAY ROMAN
(Busted)

UNITED ARTISTS UAS 5595

This number contains tales that are funny, but not-so-funny, about real situations that arise while one is in the custody of the law (jailed). The material also provides insight about how unjust and ridiculous some of these same situations are. Roman speaks with the self-admitted voice of experience. There should be at least something that everyone will be able to relate to on the campus scene. If they can't, they have never been caught **doing** anything.

Canada Liscenses

(continued from preceeding page)

All student carrier current radio broadcasting undertakings must submit a report on programming once during the academic year, as a record of the promise of performance.

The Commission also recommends that the student operators keep a regular log, to familiarize them with station management, and as a convenience should special reports be requested.

In their programming, student carrier current radio stations are expected to reflect the interests and activities of the total university or college community in which they operate; to schedule a consistently high proportion of Canadian material; and, above all, to promote innovative programming which will explore and enlarge student interests.

Where commercial activity is demonstrated to be necessary or desirable, the Commission will consider permitting it on a limited basis. Such commercial activity must not become a major concern of such broadcasting undertakings, nor may it have an appreciable effect on the revenue of local commercial stations.

Student carrier current radio broadcasts containing commercial content may not be distributed by a cable system. Applications to distribute student carrier current radio broadcasts which do not contain commercial content may be made to the Commission by cable television licensees.

Application forms for licences for student carrier current broadcasting undertakings are available from the Secretary, Canadian Radio-Television Commission, 100 Metcalfe Street, Ottawa, Ontario, K1A 0N2. These forms will include the following:

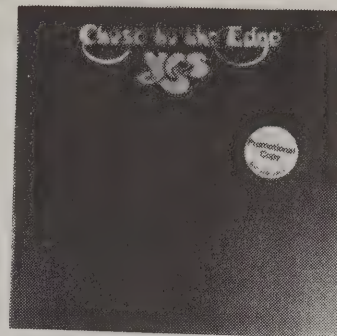
- (a) Application to the Canadian Radio-Television Commission for a licence to carry on a student carrier current broadcasting undertaking; and
- (b) Application to the Department of Communications for a technical construction and operating certificate. A technical bried demonstration that the installation, as proposed, is technically feasible, must be submitted with this application.

YES

(Close To The Edge)

ATLANTIC SD -7244

The group follows up their "Fragile" LP, from which their recent smash single "Roundabout" was culled. Vocalist Jon Anderson again proves to be one of the strong points in Yes's success, but the group also mixes tight harmony work with some fantastic instrumental sounds. Album will probably surpass previous ones in sales, as the group has already established itself as one of the top English groups on the American market.



TIM WEISBERG
(Hurtwood Edge)

A&M SP 4352

Weisberg proves himself a master of an instrument of enchantment, love and beauty on this set of tracks, and thereby qualifies as one of the greatest instrumentalists in contemporary music. Most is Jazz-Rock, but some cuts lend toward the low-light scene. Not for everyone, as it takes a sophisticated listener to appreciate this kind of are form, but it is worth giving a try if you think your audience is up to it.

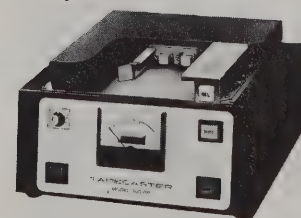
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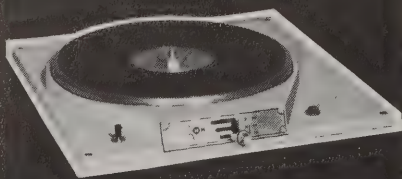
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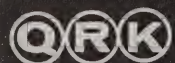
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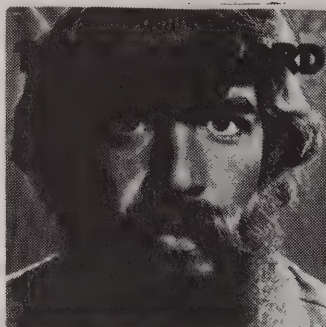
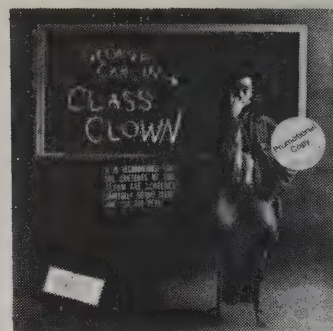
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**GEORGE CARLIN LITTLE DAVID LD 1004
(Class Clown)**

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**DOUG "COSMO" CLIFFORD FANTASY 9411
(Doug "Cosmo" Clifford)**

One cannot escape the feeling that Clifford has been influenced by Blues artists such as Ray Charles, as exhibited by his arranging of his own songs, among them "Latin Music" and "Regret It For The Rest Of Your Life." The use of soulful background vocals on these numbers reinforces this feeling. But Clifford also does a fair job of updating things such as "I'm a Man." LP attempts to bring back the simplicity and "cleanliness" of the rock and roll of the 50's.

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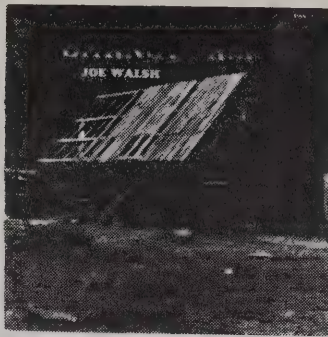
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JOHN WALSH
(Barnstorm)

DUNHILL DSX -50130

Joe Walsh, former James Gang member, breaks off with the group for his first solo album for Dunhill. The James Gang influence is there, but Joe's style is all his own. Album has to be a big one. It contains some of the best guitar to be heard anywhere. Entire LP is worthy of attention for feature cut material on college stations, and is very well produced.



RETER KANKONEN
(Black Kangaroo)

GRUNT FTR -1006

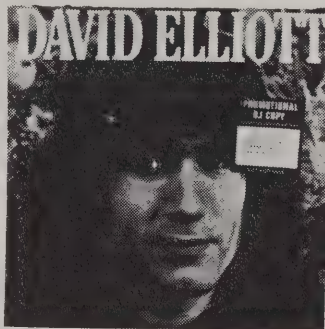
This is outstanding stuff for the hard rock enthusiast. The LP has been cut for truckin' on campus wheels. These are all Kankonen composed tunes that are intense without being brash. "What We All Know And Love" is a simple thing, but exciting for FM play.



DAVID ELLIOTT
(David Elliott)

ATLANTIC SD -7222

Another of the artist writers who are recording all original material, Elliott is a cut above most of his peers. Elliott admits that this LP is experimental and is a result of his desire to work with some English musicians, "to see how things worked out." In many ways this artist rings of James Taylor. "Dear Mary" has hit single appeal.



ASCAP's Doing Fine In Music Business

The music and record industry is an area where women are, more than ever before, holding their own in terms of both business and artistic achievement, reports the American Society of Composers, Authors and Publishers. Female membership in ASCAP is growing, with the latest Ms. talents to join being Mimi Farina and Candy Staton.

Some of the ASCAP's distinguished female members who have made important contributions to contemporary music are: Carole King, Gladys Knight, Judy Collins, Jackie DeShannon, the late Janis Joplin, Valerie Simpson, Roberta Flack, Chi Coltrane, Dorothy Fields, Gladys Shelley and Mary Lou Williams, to name a few. The Society also points out that there are many women, known primarily as ASCAP composers and/or artists, who have formed their own publishing companies, including Janis Ian, Joan Baez, Carly Simon, Estelle Levitte and Melanie.

To honor the growing activity in its female membership ranks, ASCAP will run an in-depth article on Carole King and a cover story on Dorothy Fields in the next issue of its magazine ASCAP TODAY.

— OTHER NEW RELEASES

MACONDO
(Macondo)

ATLANTIC SD 7234

CASEY KELLY
(Casey Kelly)

ELEKTRA EKS-75040

VINEGAR JOE
(Vinegar Joe)

ATCO SD 7007

JOHN KLEMMER
(Waterfalls)

IMPULSE AS - 9220

JOHN DAVID SOUTHER
(John David Souther)

ASYLUM SD 5055

ALICE COLTRAIN
(Lord Of Lords)

IMPULSE AS-9224

MAR Y SOL

(First International Puerto Rico Pop Festival)

ATCO SD 2-705

GINGER BAKER
(Stratavarious)

ATCO SD 7013

JOHNNY RIVERS
(L.A. Reggae)

UNITED ARTISTS UAS 5650

BATDORF AND RODNEY
(Batdorf and Rodney)

ASYLUM SD 5056

LES McCAIN
(Talk To The People)

ATLANTIC SD 1619

EGGS OVER EASY
(Good 'N' Cheap)

A&M SP 4366

Low Power Stations

Howard Martin

The attack some years ago by the NAEB, by the FCC in 1966, and last May by the Corporation for Public Broadcasting, on low power stations charged, in effect, they were not serving the public interest. How these stations are controlled by the licensee directly affects the quality of service offered the public. A nation wide survey of low power stations attempted to determine the degree and kind of control practices upon these stations. This is the third in a series of reports on the results of that survey. This article will discuss the control and programming of low power stations. (See JCR, April/May, 1972, and October, 1972 for other articles on minority programming and low power stations.) In the December/January issue, the final report in this series will offer conclusions and recommendations for improving services.

Licensee. 80% of the 10-watt stations are licensed in some manner to colleges and the rest to school districts or boards of education. 17% began operations since the end of the 1960's, 12% during the 1950's, and 2% before 1950. 55% reported the primary job of the licensee's chief officer was college president, etc., 22% district superintendent, etc., 16% chairman of trustees, etc., and the rest were instructors of the faculty or deans or vice-presidents of student affairs.

Reports to Licensee. By law, it's mandatory for the licensee to remain in control of the station's operation. There are various degree of control, however. One is the frequency, format, and contents of reports made by station personnel to the licensee. Almost all 10-watters (123) indicated they made reports to the licensee. 54% reported it was the advisor-manager who made the report. (See Section 2.4 below for a

definition of the terms 'advisor' and 'manager'.) 31% reported the station manager made the report, 8% someone from their policy-advisory board, 3% the chief operator, 2% the program director, and 2% the station staff. 9% of the stations must report daily, 16% weekly, 29% monthly, and 46% annually. The report is "written only" in 13% of the stations, "oral only" in 39%, and both oral and written in 48%. In those stations where the station manager makes the report, 75% of the time it is a student. 75% of the reports cover present programming, 73% policy, 70% budget, 64% equipment, 50% personnel, and 43% past programming.

Direct Licensee Control. In some stations, the licensee participates directly in station operations. 59% reported the chief officer or designee of the licensee participates directly in planning budgets, 50% equipment, 48% policy, 34% personnel, and 22% programming matters. In each of these areas, around 10% of the respondents reported licensee participation is on a daily basis and 20% on a monthly basis. 39% reported the chief officer or his designee critiques policy violations immediately after broadcast, 30% usage of equipment,

(continued on page 22)

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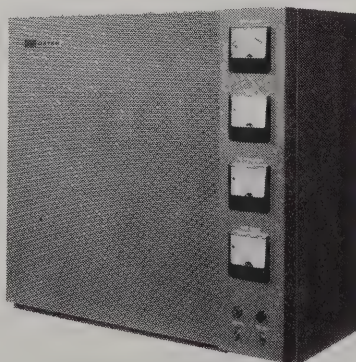
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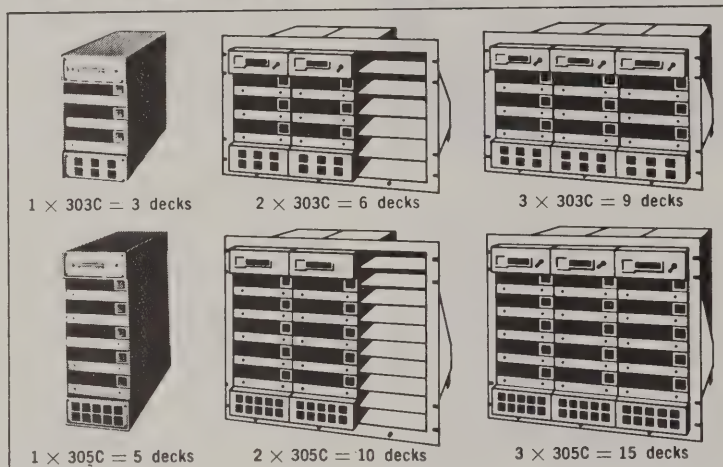
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Low Power Stations

(continued from page 20)

28% programming, and 26% personnel matter. 53% reported the licensee's chief officer or designee has prior approval rights over operators' decisions on budget matters, 35% on policy decisions, 31% on equipment usage, 22% on personnel matters, and 18% on programming. As a result of these restrictions, 25% of the respondents estimated the degree of freedom they have in operation at "total", 60% a "great deal", 7% "50/50 with the licensee", and 8% as "somewhat".

Advisor-Manager. 55% of the stations reported they have an advisor, 42% a manager, and 3% neither. Advisor was defined as one without mandatory authority, and manager as one with mandatory authority, over operations. 72% of the advisor-managers come from the faculty, 13% from the administration, 10% from the college staff, and 5% from other sources. 59% of the stations reported he is consulted daily, 29% weekly, 9% monthly, 1% each semi-annually and annually, and 1% "never". 3% of the respondents reported he is consulted in a formal manner only, 31% informally only, and 66% both formally and informally.

Whether he is an advisor or manager, he has a great deal of authority. 66% of the stations reported he has some authority over changes in policy, and 60% reported he has authority over each of the areas of personnel, budget, and programming. 83% reported he has prior approval rights over operators' decisions on budget matters, 71% on equipment matters, 68% on changes in policy, 55% on personnel matters, and 51% on programming. 46% reported he has released time; it varies from 1 to 40 hours weekly in amount.

(continued on page 23)



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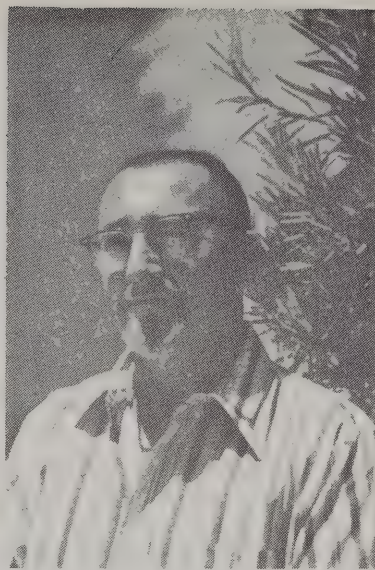
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43% of the respondents reported the advisor-manager duties are published in written form. 40% reported these duties were formulated by the licensee or chief officer of the administration; 24% by the station manager or personnel or board of directors, 14% by their policy or advisory board, 12% by a faculty member, and 10% by the advisor himself. 43% of the stations reported the licensee's chief officer appoints the advisor or manager, 25% a designee of the licensee, 16% the advisory board, 6% station personnel, and 10% "other". 70% of the respondents say the term of office is indefinite, unlimited, tenured, or permanent. 26% say it is 9 to 12 months, 3% 3 years, and 1% 3 months.

Student Manager. Most stations, other than those licensed to school districts, do have a student manager. 81% of these reported he has some authority over personnel, 74% over programming, 62% over policy changes, and 52% over budget. 66% reported his duties are published in written form. 31% reported he is appointed by station personnel, 29% by the faculty advisor, 21% by the advisory board, 7% by the licensee's chief officer or a designee of the licensee, 5% by the advisory board and advisor together, 3% by station personnel and advisor together, and the rest by "other". 46% pay the student manager; only 1 school reported this payment was in the form of class credit. 81% of the time the term of office is for the school year; 7% appoint the manager on a one-term basis; and 7% appoint him for an unspecified length of time. The rest of the stations have varied lengths for their term of office. 61% of the stations reported there are restrictions on the managers' right to hire or fire personnel. Some may hire only on the dean's recommendation, from a work-study list, or can't hire non-college people or first term freshmen. To fire, only 12 stations indicated managers must have a good reason or show cause. 13 stations are manned by students on assigned class activity, and these cannot be fired. 10 stations require staff approval before any person may be released from duties, and 6 require advisor approval.

Program Producers' Authority. Tight reins are kept on program producers. 42% of the stations reported that program producers have final authority over content in the area of news, 42% in

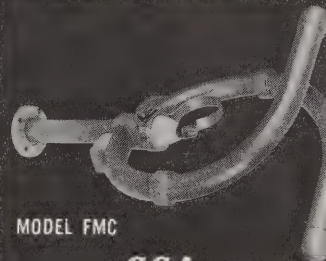
(continued on page 24)



Howard S. Martin

Professor Howard S. Martin, who began his career in broadcasting in 1949, has worked in stations in several states. He has been closely associated with three 10-watt Class D stations. Professor Martin has authored articles for the JOURNAL in the past. He is an Associate Professor and former Chairman of the Department of Radio-TV, California State College, Long Beach.

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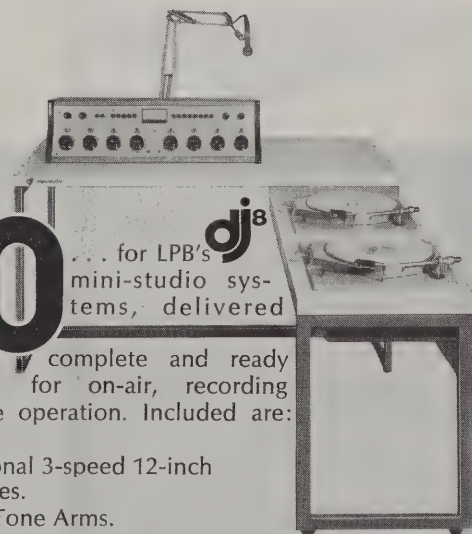
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Low Power Stations

(continued from page 23)

music, 37% in sports, 24% in publicity, 24% in cultural affairs, 22% in community affairs, 20% in minority programs, and 15% in instructional matter.

Advisory Board. 73% of the stations have an "advisory board" to help set; interpret, and enforce policy, and to advise on station operations. 12% of the boards have no faculty members, 29% have 1 faculty, 18% 2, 14% 3, 9% 4, 8% 5, 5% 6, and 5% 7 or more. 42% have no student members, 14% have 1, 10% 2, 10% 3, 10% 4, 3% 5, 6% 6, and 4% 7 or more. In most cases, these students are station personnel. 76% of the boards have no representative from the college staff, 6% have 1, 8% 2, 6% 3, and 4% 4 or more. 87% of the boards have no members from the community, including local broadcasters and businessmen; 8% do have 1 local broadcaster as a member, 2% 2, 1% 3, and 2% 4 or more.

Guidelines and Policies. 96% of the stations find it necessary to have guidelines and policies for operators to follow daily. 15% reported these guides are not written but "understood", 33% have

only written policies, 52% have both understood and written guidelines to follow. In 62% of the cases, the policies were, in some way, determined by the Advisory Board. In 17% of the stations the licensee helped determine the policies. 34 separate stations reported that their personnel participated in some way in creating the guides by which they operate. At the other extreme, the dean, board of trustees or regents, and hired station director each were reported by one station to have determined policy.

PROGRAMMING THE SMALL EDUCATIONAL FM STATION

Audiences. 32% of the stations cover 25,000 or less in population, 24% between 25,000 and 50,000, 16% between 50,000 and 100,000, 12% between 100,000 and 450,000, 12% over that figure, and 6% reported they did not know what population they served. 19% reported 5,000 or less FM homes were in range of their signal, 13% between 5,000 and 20,000 homes, 6% each between 20,000 and 50,000 homes and 50,000 and 100,000 homes, 10% more than 100,000 homes, and 46% reported they had no idea how many FM homes were in range of their signal. 50% of the stations send their program schedule to FM homes, 95% carry their schedule in promos on the station itself, 66% publish their program schedule in the campus newspaper, and 50% in community newspaper.

The audience is "poor" in income, with 28% reporting "low", "student", or "under \$5,000 yearly" as the audience they serve, 23% between \$5,000 and \$10,000, 20% above \$10,000 yearly income, and 29% stating they did not know income limits for their audience. 32% of the respondents estimated the low age range of their audience to be under 15 years of age, 51% between 15 and 20, and the rest above 20. 25% estimated the high age limit listening to be 24 or below, 26% between 25 and 29 years old, 18% in the 30's and 31% 40 years of age or older. The educational level of the audience is high, with 45% having some college education, 47% a high school background, and 8% "unknown". 57% of the stations plan a formal survey of their audience this year; 39% did a formal survey last year.

Primary Programming Objective. 29% of the stations see their primary programming objective to be education, 17% cultural affairs, 13% news and

public affairs, and 41% entertainment. Contrary to the stereotype sometimes voiced about these stations, only 23% see their primary service to be to students entering the radio profession; 37% see their primary service to student listening needs, 37% community listening needs, and 3% report other objectives. 85% believe the program preference of their audience is music, 2% religion, and 13% public affairs, such as discussions and interviews. Within music, 33% believe the preference is rock, 16% classical, 14% progressive, and 2% religious. (Others simply stated the word "music" without indicating kind or type. Nonetheless, as section 1.3 indicates, stations consider many program areas to be important.)

Cultural Programming. Turning to specific programming types, the data show that 40% of the stations do remote live broadcasts of concerts and recitals and 60% do remote taping of such programs for later broadcast. (Within the report, one must remember that these figures overlap stations, and are not mutually exclusive. That is, some stations do both live and tape coverage.) 32% of the stations do concerts live in the studio. 42% broadcast

(continued on page 26)

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CAPITAL HILL

By Bill McCloskey

College radio station news departments were a target for the McGovern campaign's audio service.

More sophisticated than the services available from various federal agencies and others, the Presidential Campaign radio news services provided hundreds of bites of actuality to stations around the national during the campaign.

As in standard with such services, broadcasters were able to dial a central number and record the material for later broadcast. In addition, volunteer and professional campaign staffers placed calls to some networks and stations every day to feed material from the candidate's latest speeches.

Both Republicans and Democrats had a member of their public relations staff travelling with each candidate recording the speeches and phone feeding selected actualities back to a central clearing house for distribution.

In a "The News Business" article for the *Washington Post*, broadcast newsman Bill Moroney, himself a former employee of one of the 1968 campaign audio services, explained how the 1972 operations worked.

He claims it is costing the parties hundreds of thousands of dollars to get their man's voice on the air. Of course, the spots are carefully edited and frequently end with applause from the crowd. The ploy is to get the listener to connect the candidate with the applause to build up the feeling that he is a popular person and that his ideas are also popular.

The McGovern-Shriver campaign, feeding material from 16 regional offices, tried to hit every station twice a day. Many college radio stations were included on the calling lists.

The Nixon-Agnew campaigners tried to hit every station five times a day. Material included political addresses by the candidates as well as statements from members of the administration citing high points of Mr. Nixon's policies.

In what the Fair Campaign Practices Committee has called one of the dirtiest Presidential campaigns ever, it was not surprising to see one party feeding tape of the other party's candidate making a loop or proposing a program that they thought was offensive to a large number of listeners.

At one point a candidate made a

crack about the intelligence of football players as a group.

That statement showed up on the opposition's audio service along with their candidate being endorsed by some football players with advanced degrees from some of the nation's top colleges.

At a news conference, McGovern campaigner Larry O'Brien dug out some old film of Candidate Nixon in 1968 calling for debates. O'Brien then read a telegram from Candidate McGovern making virtually the same challenge to

Incumbent Nixon.

On the television side, there is carefully edited film being made available too. Most station's broadcast some sort of disclaimer telling viewers that the film is being made available by the candidate. Far fewer radio stations are interpreting FCC policy to mean that they too should tell their listeners that the tape they just heard was not a product of the news department's digging, but the public relations man's phone call.

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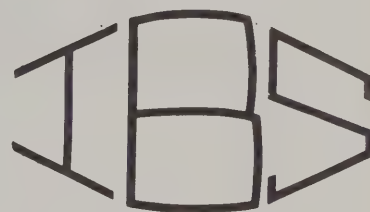


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Low Power Station

(continued from page 24)

concerts and recitals as an addition to all other regularly scheduled items. 51% pre-empt other programming for such coverage. Drama is broadcast from college and community sources by 11% live and 25% taped. 36% originate radio drama either live or taped in their studios. Of 92 stations reporting that a station in their area does not program concerts or other cultural-type material, 71% say they do fill that need.

Instructional Programming. 55% of the stations broadcast instructional programs. Of these, 16% broadcast between 5 and 30 minutes daily, 13% between 30 and 60 minutes, 27% up to two hours, 22% up to 3 hours, 12% between 3 and 4 hours, and 10% more than 4 hours daily. 40% of all stations originate instructional programming. Of these, 19% originate less than 15 minutes daily, 8% between 15 minutes and half an hour daily, 19% up to an hour, 26% up to 2 hours, 21% between 2 and 3 hours, and 7% more than 3 hours daily. 22% of all stations broadcast class lectures live and 32% tape them for later broadcast. 7% of all stations offer these

lectures for class credit. 11% of all stations have arrangements for regular broadcast of instructional programs to schools in their area. 9% program for

elementary schools, 6% for junior high schools, and 4% for high schools. Of 90 stations reporting that a station in their area does not program instruction, 53% say they do fill this need.

Music Programming. All types of music are programmed. 76% of all stations broadcast classical music, 76% rock, 59% jazz, 52% middle-of-the-road, 26% standards, 22% country/western, 18% blues/folk, 15% soul, 8% underground rock, and 7% religious. 19% of the stations devote 100% of their total broadcast time to music programming, and another 54% more than 75% of the total time to music. At the other extreme, 10% of the stations reported they devote less than 20% of their total broadcast time to music. When stations do program music, 73% report it is 100% "live" with records. The rest of the stations use some form of pre-taped music program occasionally. 44 stations reported that another station in their area did not do classical music, but of these, 34 said they do fill this need. Of 73 stations reporting another station in their area does not program jazz, 63% said they do fill this need.

News. 59% of the stations subscribe to a national news service as AP. 72% reported they consider their newsroom office space as adequate. 16% of the stations devote no time to campus news; 37% devote less than 15 minutes daily to campus news, 24% between a quarter and half hour, 13% up to 45 minutes, 5% up to an hour, and 5% between 60 and 90 minutes daily to campus news. 49% reported they do remote live coverage of local and campus news, and 72% do taped coverage. 24% of the stations devote no time to local community news, 31% give up to 15 minutes daily to this topic, 27% between 15 and 30 minutes, 13% up to 45 minutes, 3% to an hour, and 2% up to 1½ hours daily. 22% do not report national and international news. 19% devote up to 15 minutes daily to this topic, 15% between 15 and 29 minutes, 19% between 30 and 45 minutes, 7% up to an hour, 8% to an hour and a half, 5% between 90 and 120 minutes, and 5% more than 2 hours daily. In total, 7% of all stations reported they broadcast no news programs at all. 21% devote up to 30 minutes a day to broadcast of news, 25% up to an hour, 16% between 60 and 89 minutes and 90 and 120 minutes, 10% up to 3 hours, and 5%

devote more than 3 hours daily to news programming.

Commentary and Editorials. 62% of all stations program campus news analysis and commentary written and originated by station personnel, 43% on local community news, 33% on state news, and 34% on national and international news. 55% of them broadcast editorials written and originated by station personnel. Of those who do broadcast analysis, commentary, and editorials, 76% prohibit no subject areas, 7% prohibit political subjects, and other prohibitions include anti-school or personal remarks and sex-obscene matter. 54% of the stations reported the general or station manager must approve editorials, 16% the program director, 23% the management staff or executive board, 3% the faculty advisor, 3% the news director, and 1% their advisory or policy board.

Public Affairs Programming. 14% of all stations reported they did not originate any public affairs program in the sample month covered in the questionnaire. 12% originated less than 2 hours of public affairs programming during the month, 17% between 3 and 5 hours and 6 and 8 hours, 15% between 10 and 12 hours, 13% between 15 and 20 hours, and 12% more than 20 hours in the month. In 76% of the cases, these hours were interview-discussion in format. 38% of the stations do produce documentary formats. Of these, 20 originate 1 hour or less a month, 34% 2 hours, 23% 3 to 5 hours, and 23% 6 or more hours. 85% of the stations in an area where no other station does community public affairs programming say they fill this need.

Sports Programming. 99% of the stations program sports in some fashion, either play-by-play, comment, or as part of the news. 61% broadcast live play-by-play of college sports and 26% do live play-by-play of local high school sports. 67% carry these programs in addition to their regular broadcast schedule. 73% pre-empt other programs for play-by-play coverage at times. 61% of the stations in an area where no other stations program play-by-play of local college sports say they fill this need, and 45% fill the need for local high school sports.

Network Usages. 42% of all low power radio stations are affiliated with a network. 32% belong to NAEB, 26% to NER, 10% to APBE, and 40% to IBS. 11% last year produces at least one program for network distribution. 27% broadcast 30 minutes or less daily or ne

(continued on page 28)

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IBS

Questionnaire Of Spring '72 Results

This past spring, IBS mailed questionnaires to college radio stations asking questions primarily concerning programming and the relationship of IBS to the individual stations' programming philosophy and to the operation of the station in general. Tom Karnowski, editor of **FORMAT** reported the following results. In all, 125 questionnaires were returned.

WHAT KINDS OF PROGRAMMING ARE YOU INTO?

Here a station could indicate all programming areas and formats in which it is involved.

Progressive	83.2%
Top Forty	64.8
Classical	45.6
Educational	44.0
Rhythm & Blues	35.2
MOR	24.8
Jazz	13.6
Informational	12.0
Folk	8.8
Religious	4.8
Oldies	4.0
Country	2.4

OF THE ABOVE, WHAT DO YOU PROGRAM THE MOST OF?

Progressive	58.4%
Top Forty	27.2
MOR	5.2
Educational	4.0
Classical	3.2
Religious	1.6

ARE YOU A MEMBER OF IBS

Yes	108
No	9
I can be talked into it	2
Not for long	7

OUR STATION SUBSCRIBES TO THE FOLLOWING TRADE PUBLICA- TIONS:

List any and all.

Journal of College Radio	91.2%
Billboard	73.6
College Radio Report	48.0
Rolling Stone	37.6
B/ME	31.8
Broadcasting	24.0
Record World	16.8
Cashbox	6.4
db	4.8
Downbeat	3.2
Hamilton Report	3.2
Variety	2.4
Playboy	2.4
Alternatives	2.4
Crawdaddy	2.4
Audio	1.6
BMI	1.6
Zodiac News	0.8
Earth News	0.8
Gavin Report	0.8
National Lampoon	0.8
Ebony	0.8
ASCAP	0.8
Advertising Age	0.8
Hi-Fidelity	0.8
Schwann Catalogue	0.8
Penthouse	0.8

RECORD SERVICE: I GET GREAT SERVICE FROM:

Here a station could list those record companies from which it received good service.

Altantic-ATCO	36.4%
RCA-Grunt	18.4
Warner Bros.	12.8
Elektra	12.0
Columbia	12.0
A&M	7.2
Capitol	5.2
ABC-Dunhill	4.8
United Artist	3.2
Buddah	3.2
MCA-Decca	2.4
MGM	1.6
Polydor	1.6
Chess-Janus	0.8

Mercury	0.8
Motown	0.8
Tumbleweed	0.8
London	0.8
Stax-Volt	0.8

RECORD SERVICE: I GET LOUSY SERVICE FROM:

Same instructions as previous question.

Capitol	21.6%
Columbia	9.6
Warner Bros.	8.8
Motown	8.0
A&M	7.2
RCA-Grunt	5.2
London	4.8
ABC-Dunhill	4.0
United Artists	3.2
Buddah	3.2
Elektra	2.4
MCA-Decca	2.4
Mercury	1.6
Vanguard	1.6
Bell	0.8
MGM	0.8
Roulettes	0.8
Atlantic-ATCO	0.8

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Canada Issues C-C Requirements

The Director-General of the Telecommunications Regulation Branch of the Canadian Department of Communications has announced the technical certification requirements for carrier current systems. Following are the requirements as set forth in revised notice number 40.

A Carrier Current System is one involving a low power AM transmitter coupled into a power distribution system (or some other network of conductors) of a building or complex of buildings, which carries radio frequency energy along to any receiver that is in close proximity to the conductors.

Under the North American Regional Broadcasting Agreement the AM band 535/1605 kc/s is allocated for the assignment of regular broadcasting stations. However, the Department is prepared to issue Technical Construction and Operating Certificates covering Carrier Current Systems operating within this band, on the basis that:

- (1) The technical construction and operating certification requirements of the Department are met as set forth in this Notice.
- (2) No harmful interference is caused to the licensed operation of regular broadcasting stations.

Application Requirements for Technical Construction and Operating Certificates

Technical Construction and Operating Certificates for carrier current systems will be issued subject to the following conditions:

- (a) That a technical brief containing the following data shall be approved by the Department:
 - 1)- The location of the transmitter.
 - 2)- The proposed channel
 - 3)- The type of equipment to be used (Manufacturer's name, model number, power). This equipment must be approved by the Minister of Communications. (Equipment must be approved in accordance with the latest Radio Standards Procedures. Information on the re-

quirements may be obtained from any of the regional offices of the Department).

- (b) The transmitter and associated equipment shall be designed according to the latest issue of the CSA Standards C22.2 No. 98.
- (c) The carrier frequency shall remain within 0.005% of the assigned frequency.
- (d) Such apparatus shall deliver to the line network the minimum radio frequency power necessary to accomplish the desired purpose.
- (e) That the best engineering principles will be utilized in the generation of radio frequency currents so as to guard against interference to established radio services, particularly on the fundamental and the harmonic frequencies.

Proof of Performance and Certification Requirements

- (a) A Proof of Performance demonstrating that the installations meet the requirements mentioned below, must be submitted in sufficient time to arrive at the office of the Chief, Broadcasting Engineering and Certification Division, Department of Communications, Berger Building, 100 Metcalfe Street, Ottawa, Ontario, K1A 0C8 at least five working days before the desired date for regular operation.
- (b) The Department must be satisfied that radiation or induction fields extending outside the building containing the signal distribution circuit do not exceed 15 microvolts per metre, at a distance in feet from the walls of the building, given by the formula: 157,000 divided by the frequency (in kilocycles per second). The measurements shall be taken in daylight using a standard field strength meter operated by an engineer or technician experienced in this work. The readings shall be obtained with the antenna not less than ½ metre (1'8" approx.) nor more

than 3 metres (10') above ground at 12 points equally spaced as nearly as may be practical in a circle around the building. If there are overhead hydro or other wires connected to the building, readings shall be obtained with the antenna directly under and in the same plane as the wires at the prescribed distance from the building. Suitable initial planning can ensure that such test points will be among the 12 mentioned above.

We would point out that theoretically, at 100% efficiency, the field from a fraction of a milliwatt could exceed the 15 microvolts per metre limit at the defined distance from the source.

The responsibility for ensuring that at the defined distance a possible interfering signal from the carrier current system does not exceed the maximum permissible field strength and does not cause interference to authorized radio services, (which include broadcast reception), lies with the owner and operator of the system. In the event interference is caused, the operator of the system shall promptly take steps to eliminate the interference, and if the early corrective action does not eliminate the interference, remedial measures would have to be taken to the extent of closing down the transmitter.

Low Power Stations

(continued from page 26)

programs, 35% between a half hour and 1 hour, 27% up to 2 hours, and 11% 3 hours or more.

Local Production, Live - Taped. 9% of the stations reported they locally produce and broadcast between 2 and 4 hours daily "live", 23% between 5 and 7 hours, 21% between 7 and 10 hours, 26% between 10 and 14 hours, and 21% 14 or more hours. This is a remarkable achievement, particularly when one remembers that almost a fifth of the stations "air" less than 8 hours daily and almost three-quarters less than 16 hours daily. 45% of the stations reported they use no "taped" programs on a regular daily basis that they locally produce, 9% use less than 1 hour daily, 35% between 1 and 2 hours, and 11% use 3 or more hours daily of taped local shows.

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EDITORIAL

Mixed emotions. That is all that can be said of the editorial written by Mr. Eugene C. Pulliam, publisher of the *Phoenix Republic and Gazette* and *Indianapolis Star and News*. The editorial later appeared in several publications, including *Broadcasting*, as a paid advertisement. Why mixed emotions? Mr. Pulliam's plea for newspaper support of broadcast regulation fights is a welcome one. For too many years, public communication has been held back because of the fighting of these two giants of the mass communication industry. Of course, Mr. Pulliam understands that government regulations can, in the near future, apply to newspapers also.

But, on the other side of the coin, Mr. Pulliam's plea sounds very narrow and out-of-touch with the reality of today. The "fairness doctrine" is a very engrained part of American broadcasting. His statement that the doctrine "...has nothing whatever to do with fairness, but it has everything to do with the power of government to harass people whose opinions the bureaucrats don't like" is narrow indeed. Certainly, the doctrine has its shortcomings, and all too often some people use it to their advantage; but without the doctrine, the courts would be in much stronger positions to impose counter-advertising, and eventually, "counter-programming."

The editorial's statement that "The American people must understand that their individual freedom—and especially their right of free expression, which is the fundamental right of all liberty—is at stake and only affirmative action by the Congress will stop the bureaucrats" is in various ways, contradictory to his major premise. As American citizens, "Negroes, Mexican Americans, Puerto Ricans, Indians, Orientals, Gay Liberation, Women's Lib and various other groups and causes," have the "...right of free expression, which is the fundamental right of all liberty..."

(continued next page)

Publisher's Report

The Federal Communications Commission has finally issued, at the insistence of Commissioner Nicholas Johnson, a new booklet entitled, "The Public and Broadcasting—A Procedure Manual." This new publication should be a **must** for every broadcaster and listener. In essence, the manual describes the relationship of broadcaster/FCC/John Q. Public. The booklet outlines the procedures for filing complaints with the Commission, explains how one can participate in FCC proceedings, and offers advice on the use of these proceedings.

One very informative service of the manual, very useful to broadcaster and citizen alike, is the descriptive section on rulemaking proceedings. In addition to the fine explanation of what goes on, the booklet also details how one can participate in rulemaking.

The manual was recently sent to all broadcast licensees. Your station can obtain a copy by writing to the Public Information Office, Federal Communications Commission, Washington, DC 20554.

Stations are constantly printing small pamphlets which are distributed to the public. These booklets deal with "what to do if a hurricane hits," "In case of a national emergency..." "What Advertising Means to You," "How Broadcasting Strengthens The Economy," and many other fine little public relation manuals. Why not re-print the Commission's "The Public and Broadcasting" for distribution to the public? Since the manual urges readers to contact the local station in an effort to resolve differences at the local level before resorting to filing a complaint with the Commission, this could be explained in the forward written by the station. Actual names of station personnel should be listed along with telephone numbers (both office and home) in efforts for listeners and viewers to get first hand information about why a program

(continued next page)

LOOP-BACK

A new feature in *JCR* this year is a reader opinion column. Each month, an issue dealing with some aspect of the broadcasting industry will be posed to our readers. We, then in turn, ask our readers to send us their opinions, and comments to the proposition. These comments will be tallied, analyzed, and reported back to our readers in a later issue of *JCR*. We ask that you give (1) a definite yes/no answer, followed by (2) your comments. Please sign your name indicating whether you are a student, ad man, music industry, etc. Also indicate whether your name may be used in the discussion which will appear in a later issue. If you have propositions which you would like to see in this column, please send them also.

THE ISSUE THIS MONTH IS:

*"Should
FCC Commissioners
Allow Themselves
To Become
Special Constituency
Commissioners?"*

Chairman's Memo

One of the main services of the System to its member stations is the Annual Convention. At the meeting of the Board of Directors in September, basic planning for the 1973 convention took place; it will be in Washington, DC, and the Convention Committee is headed by Bob Tarleton.

The Convention next spring is coordinated to occur just prior to the National Association of Broadcasters' Convention, and is in the same city. This has been done so that delegates to our convention will be able to visit the exhibits of the NAM meeting. We are confident that NAB will again permit this.

Locating our convention on the East Coast makes it difficult for people from college stations in the Central and Western parts of the country to attend. In subsequent years the IBS Convention undoubtedly will be scheduled in other parts of the country; this has happened in the past. But this doesn't make it easier for station personnel who are well removed from Washington, DC, to attend this year.

An alternative which can be quite gratifying is to attend a regional meeting closer at hand. The Board recognizes the need for having many such meetings. IBS has the funds to help defray some of the costs. What is needed are people to organize and conduct these meetings.

Here is where the adage "The more you put into IBS the more you get out of it" becomes pertinent. Every station automatically receives services from IBS which are worth the annual dues. But a station which actively participates in System affairs gets more. IBS is an organization within which the members can make things happen to their benefit. Conducting regional meetings is one such thing.

There is a man in IBS who is trying to find people who will run regional meetings. He is Jeff Tellis, IBS Regions Coordinator, and his address is Radio Station WPKN, University of Bridgeport, 244 University Ave., Bridgeport, CT 06602.

Interested in getting more out of IBS? Let Jeff know. He'll show you how!

Editorial *(Continued from preceeding page)*

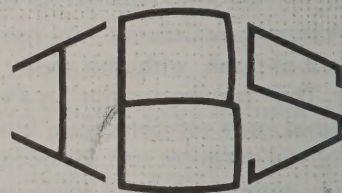
Mixed emotions? Yes. "We Can't Tolerate Government Control of TV" as Mr. Pulliam maintains, but neither can we tolerate the denial of the public to be heard.

Publisher's Report

(Continued from preceeding page)

was broadcast, or why a program was not broadcast. Does anyone realize how irritating it is to have a complaint, and when you call the station about that complaint, to have a receptionist recite a stock statement to you, and then in two or three weeks receive a stock letter from some nebulous "vice president and general manager" of the corporation.

Broadcasters are communicators; and, communication should be two-way. All too often, many broadcasters feel that they have fulfilled their obligation of communicating by sending their message out through the transmitter and into the receivers of the public. The problem is those receivers of the public will not send a message back to the station (except by the on/off method). Explain to the public how they can communicate with the station. Use more than form letters and stock phrases on the telephone. Use all of the available means to improve your relationship with the public.



INTERCOLLEGIATE BROADCASTING SYSTEM announces a NEW PROGRAM OF RESEARCH GRANTS

The purpose of these grants is to encourage research into the area of college radio. This area includes carrier-current, ten-watt FM, CAFM, education FM, commercial FM, and AM stations. The guideline stipulates: the research is to concern college broadcast stations primarily operated by students. By no means does this exempt stations in which the faculty play a supervisory role.

The extent of the grants will consist of expenses for printing, mailing, and postage, and other incidentals incurred for the study.

Awarding of the grants will be made after the proposals are evaluated by a committee from the academic community.

Awards may be made in whole or in part depending upon the importance of the problem and the cost of the study.

No deadlines are set, as this will be a continuing program, but funds are limited for each fiscal year.

Applicants should submit two copies of the proposal and one copy of an itemized expense request. These are to be sent to:

Jack Deskin, Chairman
IBS Research Committee
Department of Communication
Box 5141, Southern Station
Hattiesburg, Ms. 39401

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The new Telex 1400 Series are such machines. They've added a new dimension in design features to the rugged reliability of the Magnecord 1000 Series that fathered them. The result is the optimum combination of today's technology with field proven dependability.

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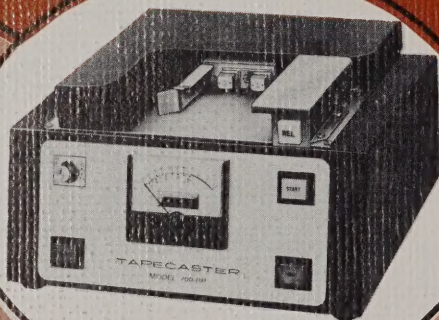
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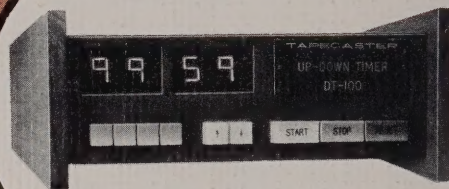


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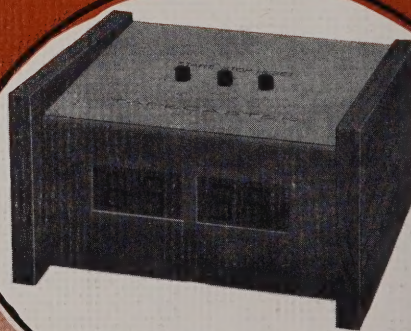
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